

WHAT IS CLAIMED IS:

1. A method for forming a high reflective reflector pattern comprising:

forming a micropattern using organometallic compound through a photoreaction or thermal energy; and

growing crystal, using the pattern as a nucleus for growing crystal, by an electro or electroless plating process.

2. The method according to claim 1, wherein the micropattern is formed through the following steps:

(a) coating the organometallic compound on a substrate to form a thin film;

(b) exposing the thin film to light through a mask to decompose the organometallic compound at exposed area and to induce a difference in solubility between the exposed and unexposed areas and developing the thin film to remove the organometallic compound of the unexposed area; and

(c) reducing or oxidizing the exposed area to form a metal pattern or metal oxide pattern.

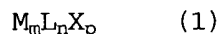
3. The method according to claim 1, wherein the micropattern is formed through the following steps:

(a) forming a pattern using the organometallic compound through soft lithography or ink jet printing; and

(b) heating the pattern to decompose the organometallic compound.

4. The method according to claim 3, wherein the soft lithography is microcontact printing or micromolding in capillaries (MIMIC).

5. The method according to claim 1, wherein the organometallic compound is represented by the following formula 1:



wherein M is a transition metal, lanthanide or representative element metal; L is a ligand; X is a monovalent to trivalent anion; m is an integer from 1 to 10, and when m is 2 or more, M may be different from each other; n is an integer from 0 to 60, and when n is 2 or more, L may be different from each other; p is an integer from 0 to 60, and when p is 2 or more, X may be different from each other; L may act as a ligand bonding two metals when two or more metals are used; and n and p are not simultaneously 0.

6. The method according to claim 5, wherein M is a late transition metal (IX-XII) selected from the group consisting of Co, Ni, Pd, Pt, Cu, Ag, Au, Zn and Cd, or a representative element metal.

7. The method according to claim 5, wherein L is a ligand selected from the group consisting of acetylacetonates, acetates, β -ketoiminates, β -diiminates, β -ketoesters, dialkyldithiocarbamates, carboxylates, oxalato, halogens, hydrogen, hydroxy, cyano, nitro, nitrate, nitrosyl (NO^-), azides, thiocyanato (NCS^-), isothiocyanato (SCN^-), alkoxy ligands, pyridines, amines, diamines, arsines, diarsines, phosphines, diphosphines, arenes, carbonyl, imidazolylidene, ethylene, acetylene, aquo, thiocarbonyl, thioether and derivatives thereof.

8. The method according to claim 5, wherein X is an anion selected from the group consisting of halogens, hydroxy, cyano (CN^-), nitro (NO_2^-), nitrate (NO_3^-), nitrosyl (NO^-), azide (N_3^-), thiocyanate (NCS^-), isothiocyanate (SCN^-), tetraalkylborate (BR_4^- , R = methyl, ethyl or phenyl group), tetrahaloborate (BX_4^- , X = F, Br), hexafluorophosphate (PF_6^-), triflate (CF_3SO_3^-), tosylate (Ts^-), sulfate (SO_4^{2-}), and carbonate (CO_3^{2-}).

9. The method according to claim 6, wherein the organometallic compound is silver compound.

10. A high reflective reflector pattern that is prepared by one of methods according to claims 1 to 9.

11. A reflective or transflective liquid crystal display device containing the high reflective reflector pattern according to 10.